

State of California  
Business, Transportation and Housing Agency  
Department of Transportation

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HIGHWAY ROUTE MATTERS  
Route Adoption of a Traversable Highway  
Resolution HRA 01-4  
10-MER-140 KP 56.3/63.7 (PM 35.0/39.6)

CTC Meeting: December 5-6, 2000

Agenda Item: 2.3a.(3)

Original Signed By  
W.J. EVANS, Deputy Director  
Finance  
November 27, 2000

### **ADOPTION OF TRAVERSABLE HIGHWAY**

#### **RECOMMENDATION**

Submitted to the California Transportation Commission are Resolution HRA 01-4 and map of the location on State Highway Route 140. Pursuant to Section 75(a) of the Streets and Highways Code, the Commission at any time and from time to time may adopt the location of State highways on routes authorized by law. It is recommended that the Commission approve the resolution in accordance with the recommendation of the Deputy Director, Project Development. This resolution adopts as a traversable highway 4.7 kilometers (2.9 mile) into State Highway 140 in the City of Merced in Merced County.

A Project Report was completed in February 1999. A Supplemental Project Report was completed in June 2000. The project has been determined to be Categorically Exempt from the California Environmental Quality Act (CEQA) and Categorically Excluded under the National Environmental Protection Act (NEPA).

Original Signed By \_\_\_\_\_

Recommended by: BRENT FELKER, Deputy Director Project Development

## **Background**

Route 140 is an interregional commuter, recreational and commodity transport route connecting the Central Valley Region. Route 140 is predominately a two-lane conventional highway. Within the project limits, the existing Route 140 junctions with Route 99 southbound at V Street and has coincident routing for approximately 3.2 kilometers (1.99 miles) to Yosemite Park Way. Route 59 junctions with Route 99 at the Martin Luther King Way Interchange and has coincident routing with Route 99 northbound to the V Street Interchange, a distance of approximately 1.8 kilometers (1.1 miles). At the project location, Route 99 is an elevated, divided 4-lane freeway that traverses over R Street and V Street.

The R Street and V Street interchanges on Route 99/59/140 are unsignalized tight diamond interchanges with single lane ramps. The interchanges are located approximately 0.8 kilometer (2635-feet) apart. Both the existing R Street and V Street at the Route 99/59/140 undercrossings contain two travel lanes, left turn pockets at the intersections, and both shoulders and pedestrian sidewalks along each side.

13<sup>th</sup> and 14<sup>th</sup> Streets between R and V Streets are two-lane local roads that provide for travel in each direction. The streets run parallel to Route 99/59/140 and contain local businesses on the opposite side of the highway. The 13<sup>th</sup> Street intersections at R and V Streets are both signalized. The 14<sup>th</sup> Street intersections at R and V Streets are not signalized.

The Merced County Association of Governments (MCAG) initiated this project to improve the operations along Route 99/59/140 in the City of Merced. Existing operational issues exist due to the R and V Street interchanges being only 0.8 kilometer (0.5 mile) apart, weaving distances of only .107 kilometer (351-feet), unsignalized ramps, and high volumes of traffic utilizing the interchanges. Traffic has been known to back up onto Route 99/59/140 creating delays to the mainline. Also a higher than expected accident rate exists at these locations. A Project Study Report (PSR) was developed in mid-1995 to examine potential solutions that would improve the current safety and operational issues at the interchanges within the project limits. Alternatives 1 and 2 were developed in addition to a no build alternative. Both the City of Merced and the Project Development Team indicated a preference Alternative 2.

A modification to Alternative 2 was developed in 1997. The proposed modification would allow southbound Route 99 traffic to exit directly to the V Street/13<sup>th</sup> Street/Route 140 Interchange and became known as Alternative 2A. At a Project Development Team meeting held on December 22, 1998, representatives from the City of Merced, MCAG and District 10 functional units all agreed that Alternative 2A would best accomplish the goals of the project and that the preliminary design of this alternative should continue.

## **Proposal**

This project proposes to improve safety and relieve congestion at the R Street and V Street Interchanges on Route 99/59/140 in the City of Merced by eliminating the four on and off ramps between R and V streets. This project also proposes to convert local streets (13<sup>th</sup> and 14<sup>th</sup> streets) adjacent to Route 99/59/140 to one-way couplets to convey traffic between R and V Streets and improve the remaining ramps through signalization, widening and realignment. This project establishes a route adoption map for Route 140 within the limits of the City of Merced.

The preferred alternative (Alternative 2A) has two significant features that would improve the R Street and V Street interchanges from a safety and operational standpoint. The first feature is that all the ramps leading to and from Route 99, (excluding the right turn slip ramp leading from Route 99 to Route 140), would connect with R and V Streets at the 13<sup>th</sup> and 14<sup>th</sup> Street intersections and all of these intersections would be signalized. This feature would eliminate any unsignalized intersections formed by the existing ramp connections and concentrate the traffic at the four main intersections associated with the two interchanges. Thus allowing for the phasing though of traffic and eliminating potential back up at the off ramps caused by high volumes of cross traffic and a lack of signals at the ramp connections to R and V streets.

The second significant feature of Alternative 2A is that it allows traffic to be conveyed between R and V Streets by converting 13<sup>th</sup> and 14<sup>th</sup> Streets into one-way couplets and bringing them into the State Highway system. The couplets are necessary as a result of the elimination of the four interior Route 99 ramps between R and V Streets. The couplets would serve as both State Routes 59 and Route 140. By making the streets one-way, phases at the signalized intersections would be eliminated and therefore would convey traffic travelling on Routes 59 and 140 through the interchanges quicker.

### **Coordination**

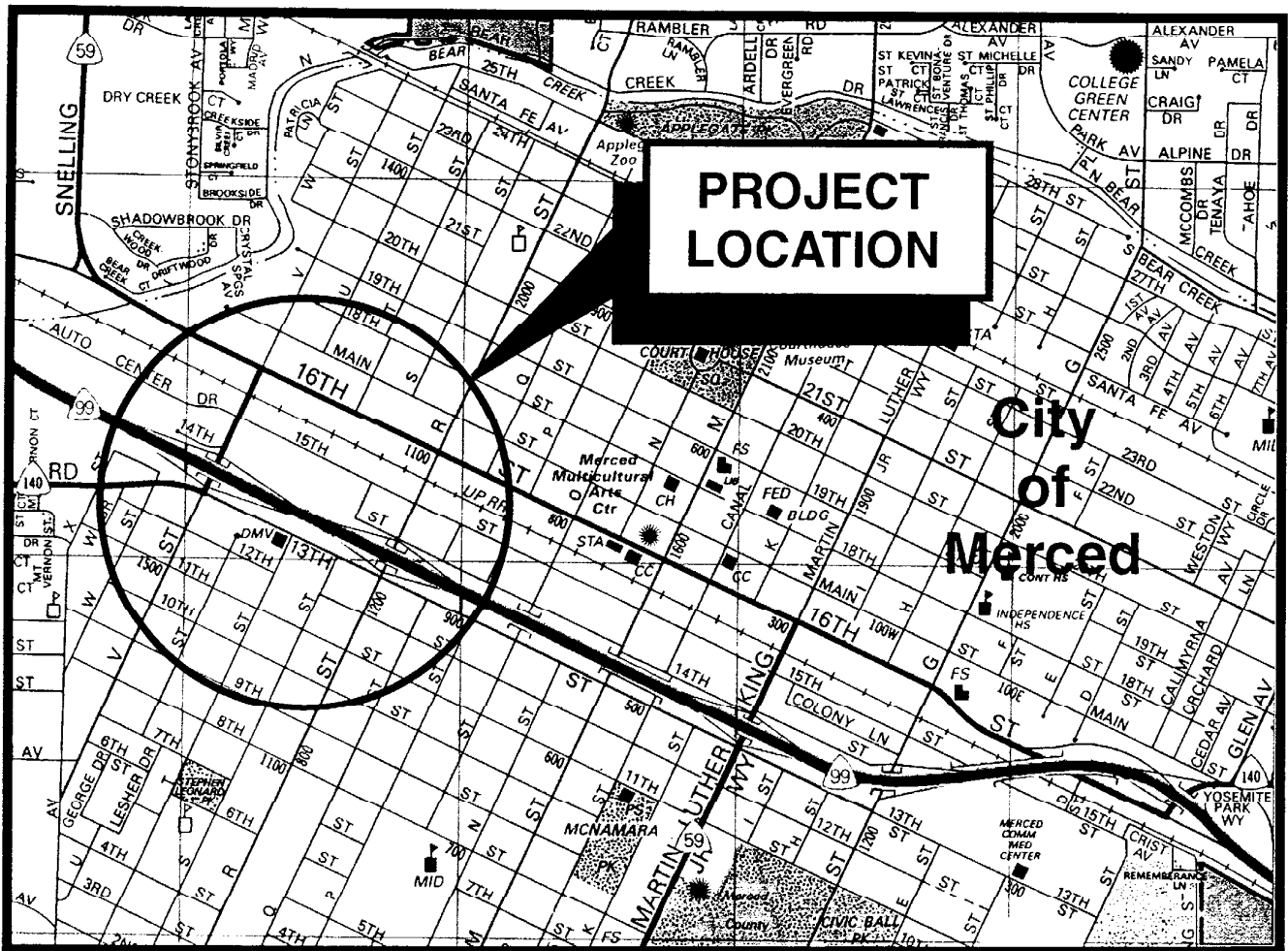
A Cooperative Agreement between the City of Merced and the State covering is currently being drafted. The agreement will have provisions for the City to pay their share of the traffic signalization costs associated with the project. The City's share for the construction phase of the traffic signals is estimated at \$200,000.

There are two nonstandard mandatory design features associated with this project. An "Exceptions to Advisory Design Standards Fact Sheet" which addresses each of these features was approved on January 21, 1999.

The project has been determined to be Categorical Exempt from the California Environmental Quality Act (CEQA) and Categorical Excluded under the National Environmental Protection Act (NEPA).

### **Conclusion**

The proposed project is needed to improve the safety and relieve congestion at the R Street and V Street Interchanges on State Route 99 in the City of Merced. For this reason, the adoption of the proposed traversable highway for Route 140 is in the best public interest.



LOCATION MAP



10-MER-99/59/140

CALIFORNIA TRANSPORTATION COMMISSION

Resolution Authorizing  
A Traversable Highway  
10-MER-140 KP56.3/63.7 (PM 35.0/39.6)

Resolution Number HRA 01-4

**WHEREAS**, the Department of Transportation (Caltrans), with input of the project from the City of Merced and the Merced County Association of Governments, has completed studies and the public circulation process relative to the improvement of a portion of Route 140 in the City of Merced, in the County of Merced; and

**WHEREAS**, the Department of Transportation has completed a Categorical Exemption/Categorical Exclusion Form; and

**WHEREAS**, this project will not have a significant effect on the environment; and

**NOW, THEREFORE, BE IT RESOLVED** by the California Transportation Commission that pursuant to the authority vested in it by law, this Commission does hereby adopt the location of Route 140, Kilometer Post 56.3 (Post Mile 35.0) to Kilometer Post 63.7 (Post Mile 39.6), the segment of 13<sup>th</sup> Street between R Street and V Street; the segment of 14<sup>th</sup> Street between R Street and V Street; and the segment of V Street between 13<sup>th</sup> Street and 14<sup>th</sup> Street in the City of Merced in Merced County and officially designated as 10-MER-140 as said location is shown on the maps submitted on December 1, 2000, by Robert L. Buckley, Chief Design Engineer; and

**BE IT FURTHER RESOLVED** that this Commission has found and determined, and hereby declares, that such adoption of the location of said State Highway is in the best interest of the State.